

WHAT IS CLAIMED IS:

1. A laminated structure comprising:
a first substrate;
a second substrate; and
a pressure sensitive hot melt adhesive bonding the first
5 substrate and the second substrate to one another, wherein
the adhesive includes an amorphous polyalphaolefin and a
crystalline polypropylene having a degree of crystallinity of
at least about 40%, said amorphous polyalphaolefin comprising
a butene-1 terpolymer with ethylene and propylene.
2. The laminated structure of Claim 1, comprising
between about 70% and about 90% of the amorphous
polyalphaolefin, and between about 10% and about 30% of the
crystalline polypropylene.
3. The laminated structure of Claim 1, comprising
between about 73% and about 87% of the amorphous
polyalphaolefin, and between about 13% and about 27% of the
crystalline polypropylene.
4. The laminated structure of Claim 1, comprising
between about 75% and about 85% of the amorphous
polyalphaolefin, and between about 15% and about 25% of the
crystalline polypropylene.
5. The laminated structure of Claim 1, wherein the
degree of crystallinity of the crystalline polypropylene is
at least about 60%.
6. The laminated structure of Claim 1, wherein the
degree of crystallinity of the crystalline polypropylene is
at least about 80%.
7. The laminated structure of Claim 1, wherein the
amorphous polyalphaolefin has a number-average molecular

weight between about 5,000 and about 30,000.

8. The laminated structure of Claim 1, wherein the amorphous polyalphaolefin has a weight-average molecular weight between about 20,000 and about 60,000.

9. The laminated structure of Claim 1, wherein the amorphous polyalphaolefin has a weight-average molecular weight between about 25,000 and about 50,000.

10. The laminated structure of Claim 1, wherein the crystalline polypropylene has a number-average molecular weight between about 3,000 and about 200,000.

11. The laminated structure of Claim 1, wherein the crystalline polypropylene has a number-average molecular weight between about 10,000 and about 100,000.

12. The laminated structure of Claim 1, wherein the adhesive composition has a melt index between about 200 and about 2000 grams per 10 minutes.

13. The laminated structure of Claim 1, wherein the adhesive composition has a melt index between about 400 and about 1800 grams per 10 minutes.

14. The laminated structure of Claim 1, wherein the adhesive composition has a melt index between about 500 and about 1500 grams per 10 minutes.

15. The laminated structure of Claim 1, wherein the butene-1 terpolymer comprises between about 20% and about 65% by weight butene-1.

16. The laminated structure of Claim 1, wherein the butene-1 terpolymer comprises between about 30% and about 55% by weight butene-1.

17. The laminated structure of Claim 1, wherein the crystalline polypropylene comprises at least one of the group consisting of isotactic polypropylene, syndiotactic polypropylene, and combinations thereof.

18. The laminated structure of Claim 1, wherein the first and second substrates are each part of a single substrate.

19. The laminated structure of Claim 1, wherein each of the first and second substrates is selected from the group consisting of: nonwoven material, woven material, and film.

20. The laminated structure of Claim 1, wherein at least one of the first and second substrates comprises at least one of the group consisting of cellulosic material, thermoplastic material, and combinations thereof.

21. The laminated structure of Claim 1, wherein at least one of the first and second substrates comprises at least one of the group consisting of a necked-bonded laminate, a polypropylene spunbonded layer, and a
5 polyethylene layer in combination with a polypropylene spunbonded layer.

22. The laminated structure of Claim 1, wherein the first and second substrates each comprise a neck-bonded laminate.

23. The laminated structure of Claim 1, wherein the first substrate comprises a film and the second substrate comprises a spunbond web.

24. The laminated structure of Claim 1, wherein the adhesive composition is melt-blown onto at least one of the first and second substrates.

25. The laminated structure of Claim 1, wherein the adhesive composition is applied to at least one of the first and second substrates in a swirl pattern.

26. The laminated structure of Claim 1, wherein the adhesive composition is applied to at least one of the first and second substrates in a concentration of between about 1 gram per square meter and about 50 grams per square meter.

27. The laminated structure of Claim 1, wherein the adhesive composition is applied to at least one of the first and second substrates in a concentration of between about 5 grams per square meter and about 20 grams per square meter.

28. The laminated structure of Claim 1, wherein the laminated structure has a dynamic shear bond strength greater than a dynamic shear material strength.

29. The laminated structure of Claim 1, wherein the laminated structure has a static peel bond strength greater than a static peel material strength.

30. An absorbent article comprising:

a first substrate;

a second substrate; and

a pressure sensitive hot melt adhesive bonding the first substrate and the second substrate to one another, wherein the adhesive includes from about 70% to about 90% amorphous polyalphaolefin and from about 10% to about 30% crystalline polypropylene having a degree of crystallinity of at least about 40%, said amorphous polyalphaolefin comprising a butene-1 terpolymer with ethylene and propylene.

31. The absorbent article of Claim 30, wherein the butene-1 terpolymer comprises between about 20% and about 65% by weight butene-1.

32. The absorbent article of Claim 30, wherein the butene-1 terpolymer comprises between about 30% and about 55% by weight butene-1.

33. The absorbent article of Claim 30, wherein the crystalline polypropylene comprises at least one of the group consisting of isotactic polypropylene, syndiotactic polypropylene, and combinations thereof.

34. The absorbent article of Claim 30, wherein at least one of the first and second substrates comprises at least one of the group consisting of a necked-bonded laminate, a polypropylene spunbonded layer, and a polyethylene layer in combination with a polypropylene spunbonded layer.

35. The absorbent article of Claim 30, comprising a diaper.

36. The absorbent article of Claim 30, comprising swim wear.

37. The absorbent article of Claim 30, comprising child training pants.

38. The absorbent article of Claim 30, comprising an adult incontinence garment.

39. The absorbent article of Claim 30, comprising a feminine care product.

40. The absorbent article of Claim 30, comprising a medical garment.

41. The absorbent article of Claim 30, comprising between about 73% and about 87% of the amorphous polyalphaolefin, and between about 13% and about 27% of the crystalline polypropylene.

42. The absorbent article of Claim 30, comprising between about 75% and about 85% of the amorphous polyalphaolefin, and between about 15% and about 25% of the crystalline polypropylene.

43. The absorbent article of Claim 30, wherein the degree of crystallinity of the crystalline polypropylene is at least about 60%.

44. The absorbent article of Claim 30, wherein the degree of crystallinity of the crystalline polypropylene is at least about 80%.

45. The absorbent article of Claim 30, wherein the amorphous polyalphaolefin has a number-average molecular weight between about 5,000 and about 30,000.

46. The absorbent article of Claim 30, wherein the amorphous polyalphaolefin has a weight-average molecular weight between about 20,000 and about 60,000.

47. The absorbent article of Claim 30, wherein the crystalline polypropylene has a number-average molecular weight between about 3,000 and about 200,000.

48. The absorbent article of Claim 30, wherein the crystalline polypropylene has a number-average molecular weight between about 10,000 and about 100,000.

49. The absorbent article of Claim 30, wherein the adhesive composition has a melt index between about 200 and about 2000 grams per 10 minutes.

50. The absorbent article of Claim 30, wherein the adhesive composition has a melt index between about 400 and about 1800 grams per 10 minutes.

51. The absorbent article of Claim 30, wherein the adhesive composition has a melt index between about 500 and about 1500 grams per 10 minutes.